

ABSTRACT OF THE DISCLOSURE

In a preferred embodiment, the invention relates to a process of sequestering carbon dioxide. The process comprises the steps of: (a) reacting a metal silicate with a caustic alkali-metal hydroxide to produce a hydroxide of the metal formerly contained in the silicate; (b) reacting carbon dioxide with at least one of a caustic alkali-metal hydroxide and an alkali-metal silicate to produce at least one of an alkali-metal carbonate and an alkali-metal bicarbonate; and (c) reacting the metal hydroxide product of step (a) with at least one of the alkali-metal carbonate and the alkali-metal bicarbonate produced in step (b) to produce a carbonate of the metal formerly contained in the metal silicate of step (a).